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ABSTRACT

This document describes how the Florida Linkage System approach to local problem solving might be implemented in other school districts. It is presented here as a general strategy that can be adapted to meet the specific needs of a given school. The FLS model is comprised of a sequence of steps and activities leading to continuous improvement by making maximum use of the human resources in an educational system. Case studies of the application of the model are given. (Author/LH)

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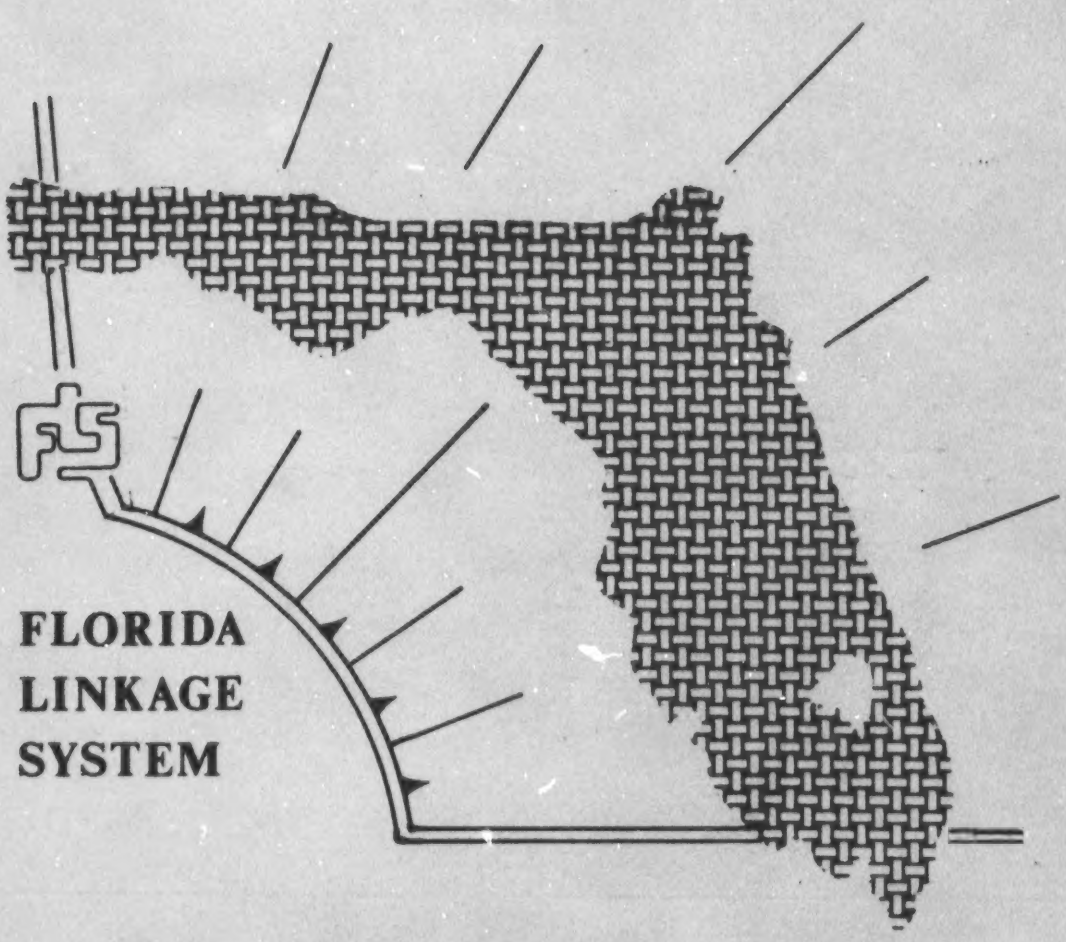

FLORIDA LINKAGE SYSTEM

A 'people-approach' to problem solving

Table of Contents

Introduction . . . . . .

Overview 3

Pathway to Continuous Improvement 10

Problem Analysis 22

Solution Selection 43

Implementation and Evaluation 54

Related Materials 65

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Introduction

More than ever before, teachers and administrators are being called upon to make major decisions about educational improvements. In the past many of these decisions were made at the district or state level and passed down. However, a renewed emphasis on student performance and accountability has stimulated the reallocation of district resources and services in favor of the local school unit. This means that teachers and administrators will face tough decisions about which educational programs, materials and services are best for their students.

The decision to change some aspect of the school's instructional or organizational pattern will involve much more than just the purchase of new materials, for example, to upgrade the reading program. Teachers will want to know about alternative programs and how they compare to the specific need(s) for improvement. How much of their time will be required for training

Where can they see the program in action? How much improvement should be expected and how soon? How will parents feel about the change? These and similar questions reflect needs for information and assistance which are not always available at the local school.

The Florida Linkage System (or simply, FLS) responds to these kinds of needs by linking people in the schools to appropriate sources of information and/or assistance. Examples might include a university consultant to assist in the diagnosis of the underlying problem, written information about validated products and training opportunities in your own school. Just as important, the Florida Linkage System provides special training for a school "facilitating team" to follow the project through to completion.

This document describes how the Florida Linkage System approach to local problem solving might be implemented. As presented here, it is a general strategy that can be adapted to meet the specific needs of a school.

Overview

The Florida Linkage System provides support for local school improvement in at least two ways. First, it provides information, training and other forms of assistance to teachers and administrators during all phases of change activity -----from planning to evaluation. Second, it suggests a model for systematic problem solving that can be applied to most any level of concern----from in-house communications to student achievement in the basic skills.

The first of these services, linkage to information and human resources, is usually coordinated through a specially trained district staff member (a "linker") who works with individual schools. Detailed information about linkage functions is available in another set of FLS materials, entitled Training for Facilitating and Linking. (A brief description of these and other materials is provided later in this document.)

It is the second kind of support for educational change activity----providing a model for continuous improvement through problem solving----that is the subject of the present materials. Their overall design can be outlined as follows:

I. Problem Analysis

   A. Becoming aware of and communicating needed improvements to the school community

   B. Analyzing the problem situation

II. Solution Selection

   A. Determining solution requirements

   B. Searching for potential solutions

   C. Selecting the "best" solution(s)

III. Implementation and Evaluation

   A. Planning for implementation and evaluation

   B. Following through and giving feedback to the school community

A Model for Continuous Improvement Through Problem Solving

At the heart of the Florida Linkage System is a model for systematic problem solving that can be used by teachers and administrators as they deal with their own local concerns. While the support aspect of FLS encourages linkage to district, state and national resources, this is only to expand the capacity of local schools to deal with some of the more complex problems they are likely to face. Most problems, however, can be handled quite well using existing resources and personnel.

The model provides for an on-going system of detecting and monitoring possible areas of concern. These might include student performance deficits, behavior problems which interfere with student learning and achievement, or even problems of school and community relations. Such an on-going detection system can be provided by a "facilitating team,"

composed of specially trained members of the school staff and administration. Or the need might be equally well met by upgrading the skills of an already existing team; for example, an instructional improvement committee made up of teachers, parent volunteers and the principal. The purpose is to assist the rest of the faculty analyze the problem situation, then specify the characteristics of an appropriate solution.

When the school's needs can't be met using existing resources, materials or instructional procedures, it may then be appropriate to expand the resource and information base that is available. Through the facilitating team and the linker, the problem situation can be translated into an information search request. This, in turn, is forwarded to the appropriate district, state or national data bank.

When the information resources at the Florida Department of Education are tapped, personnel there study the available and validated results of Research and Development efforts around the country. They communicate back to the school a number of possible options which should be considered.

However, the final decision to adopt or adapt any particular solution is made by the teachers and principal of the local school. They are the ones who must bear the effort required to bring about constructive change. Accordingly, their involvement in decision making is important.

It is possible that satisfactory alternatives to the problem can't be found among the products or practices that are currently available. In that case, the school may opt to re-enter the search and expand the kinds of alternatives it is willing to consider. If the school's needs are still not satisfied, the teachers and principal may elect to originate a research and development effort of their own.

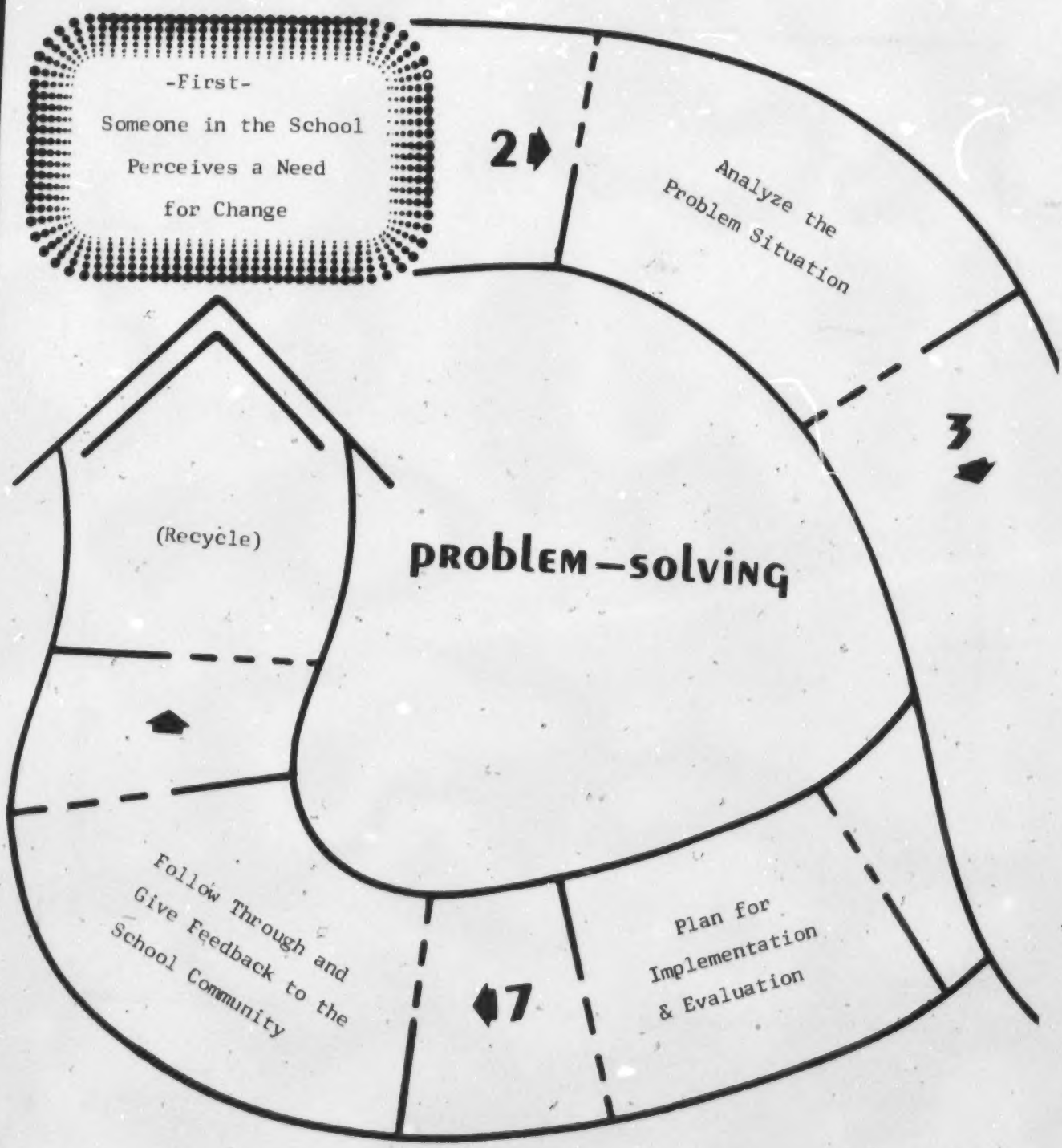
Usually, however, there are available materials or procedures that have been developed elsewhere in the district, state or nation which are appropriate for the school's particular concern for improvement. In fact, a common difficulty is that there are so many competing alternatives that it's hard to make a purely objective decision and still please everyone concerned. Here too, the Florida Linkage System

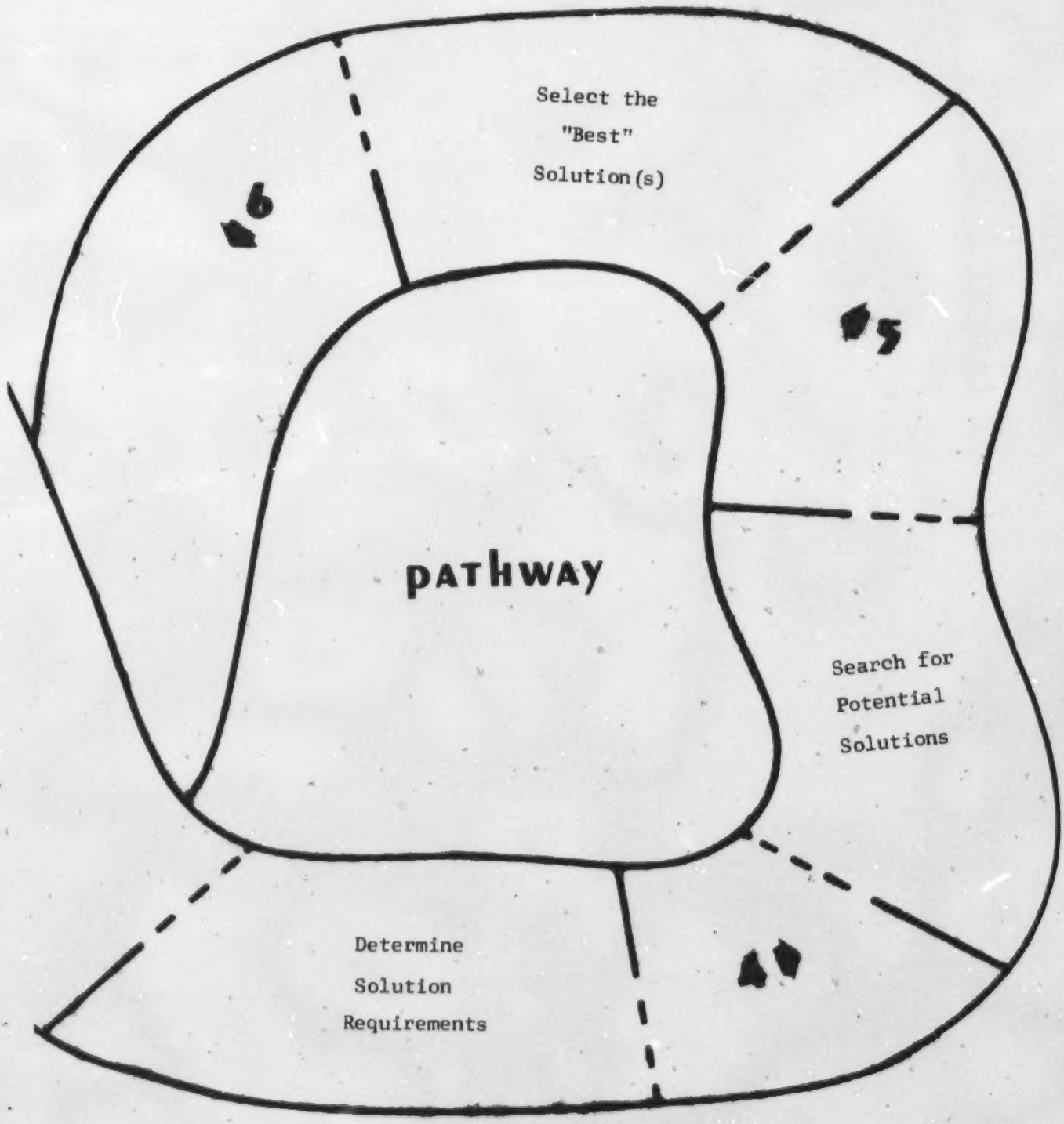
provides training and technical assistance to linkers, university consultants and members of the school's facilitating team.

Once the school has selected an option, the facilitating team works out a plan for managing, supporting and evaluating its implementation. When the adopted product or practice has completed several cycles of use and becomes a regular part of the school routine, then the implementation phase is complete.

What remains is the systematic appraisal of the results of the change effort and a subsequent decision whether to continue as is, modify or terminate the use of the new product or practice. This kind of summative evaluation allows the faculty and administration to reach at least temporary closure on their planning and implementation efforts so far. It also provides the necessary catalyst to restart the cycle, to identify other significant school problems, search for appropriate solutions and implement these. In this way, the Florida Linkage System encourages continuous improvement.

Another way to view the FLS model is as a sequence of steps and activities----a pathway to continuous improvement through systematic problem solving. This analogy will be used to help illustrate the various steps described so far and point out some alternative routes. First, the whole picture.


-First-
Someone in the School
Perceives a Need
for Change
2
Analyze the
Problem Situation
3
(Recycle)
PROBLEM—SOLVING
Follow Through and
Give Feedback to the
School Community
7
Plan for
Implementation
& Evaluation


Select the
"Best"
Solution(s)
#6
#5
PATHWAY
Search for
Potential
Solutions
Determine
Solution
Requirements
#4

Where Does the Model Apply?

For most of the day-to-day problems that a teacher encounters, there is no compelling reason and very little time to engage in detailed analysis. Usually, one's professional experience provides insight into the problem and suggests a number of familiar or potential alternatives. The positive results of each such experience tend to reinforce the use of certain techniques and materials. On the other hand, negative results are likely to discourage the use of less effective techniques and materials. Thus, an invaluable backlog of personal experience accumulates.

Larger or more pervasive problem situations are often handled quite well on a small group or grade level basis or with the help of a university or Department of Education consultant. Here, the aggregate experience of many years and alternative perspectives can be brought to bear on the

need for improvement. This need might result from problems in student performance, behavior or attitude. Or it may arise from adverse conditions which exist in the physical or organizational climate of the school.

Then, too, some problems are of such magnitude or affect so many people that they are best handled on an even broader scale, involving teachers, administrators, parents from the school community and technical assistance from outside consultants. It is at this level that the Florida Linkage System model for continuous improvement is most helpful.

Someone in the School-

Community Perceives

A Need for Change

How Does the Process Begin?

Effective school improvement comes about as a result of a cooperative effort among teachers, administrators and parents who feel a common need for change. Their perceptions of a problem situation, a performance deficit or an opportunity worth pursuing are catylists for systematic and lasting improvement. Thus, the impetus for change is generated and maintained from within the school community, though outside resources and assistance may be called in from time to time.

When there is no perceived need for change on the part of the school community, there is little commitment to the change process and little chance for real improvement. This is one reason so many state and district mandates fail to produce their intended results----because the need for change is not so clearly evident at the school or classroom level. Or the direction for change may be so vague that it cannot be translated into specific courses of action.

The FLS model provides that the stimulus for improvement should originate from within the school community. This means that perceptions should be shared and clarified among teachers, administrators and parents. One way of doing this is to periodically review goals and objectives, as well as the procedures that are available for keeping track of changes in student outcomes.

The FLS model also encourages the formation of a school "facilitating team," composed of teachers and at least one administrative representative. Some of their responsibilities include gathering information, facilitating the exchange of ideas and perceptions, and assisting the faculty during the process of problem analysis. This team is viewed as an ongoing part of the school organization, though membership may vary according to the particular concern.

How would the model work in a school? In order to further illustrate how the FLS problem solving model might be applied to different situations, two case studies will be introduced: Bridgeton and Gatorville.

Bridgeton

Case I

The Bridgeton simulation was designed to illustrate how a school would work through several kinds of problems. One of their perceived needs for change, the improvement of school communications, will be summarized here. (For the full text, refer to Module #2, "Problem Solving Simulation," of the series, Training for Facilitating and Linking.)

Background

Bridgeton was an elementary school located in one of the older residential areas of the city. Sixty percent of the pupils were from low socio-economic backgrounds: 45% were Black and 15% Hispanic children. Attendance was often poor and health problems were numerous. The school building was the target of more than average vandalism such that repairs and replacements for the old physical plant consumed a large portion of the school's budget. The teachers' pay scale was below the state average. Pupil achievement scores on standardized tests taken recently were below average for 64% of all items.

Who Perceived the Need for Change?

A new principal was assigned to the school the year the state accountability act was passed. She found many discipline problems in the school, poor support from the school community, a large number of students failing in their school work and strained relations among the faculty. She was commited to change and saw the unit of change to be the entire school program and its organization.

Gatorville

Case II

The Gatorville simulation is primarily concerned with low achievement in reading among many students at the school. (The full text of this case study is available in the Solution Implementation Package that is provided to district and Teacher Education Center linkers.)

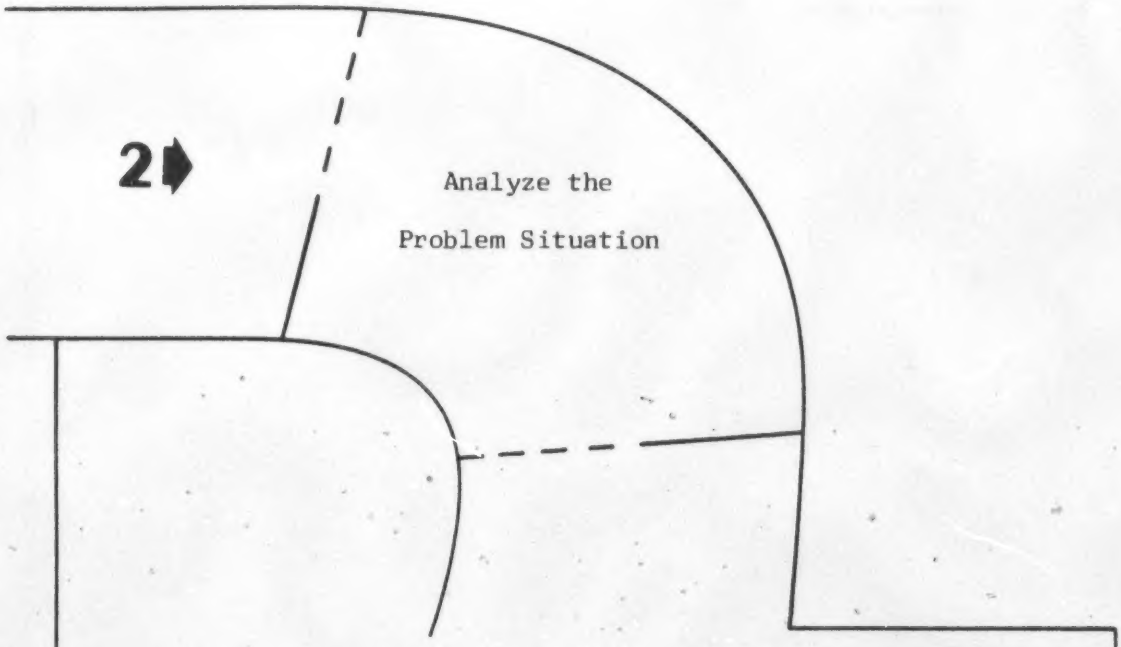
Background

Gatorville Elementary school was located on the edge of town and drew a significant number of students from nearby rural areas. 44% of the pupils were from low socio-economic households, 20% of these from Spanish speaking families. Due to changes in the economic structure of the community, what had once been a homogeneous student body was now composed of numerous groups, each different in skill level and cultural orientation. Though enrollment had grown steadily over the years, there was a steady decline in parental involvement in school affairs.

Who Perceived the Need for Change?

The perceived need for change originated with a small group of teachers in grades 1-4 who became concerned with a trend toward lower reading performance by the children. Several teachers had been with the school long enough to notice a change in the cultural make up of the community and felt that the decline in student performance was related to a lack of parental involvement in student learning at home.

A few were concerned about the organization of reading instruction. They felt that group-paced instruction was not appropriate for the wide variety of individual needs they encountered. Still other teachers singled out the materials that were being used, saying they called for prerequisite skills the students didn't have.



Certainly there are numerous strategies for problem analysis which, when appropriately applied, will result in a clear definition of the perceived need for improvement. The choice of a particular strategy should be guided by consideration of the kind of problem under consideration (e.g., student performance, school organization, community involvement, etc.). The intention here is to suggest some alternative approaches, but not to imply that these are the only ones that will work.

PROBLEM SIGNALS

Perhaps one of the best ways to clarify one's ideas about the specific school improvements that seem necessary and at the same time to learn what other people are thinking is to share information (data) about the apparent problem. Or, if this information isn't readily available, to first collect information that will assist the school community examine its current status.

Too often solutions are identified and implemented on the basis of incomplete or inaccurate information. This can be prevented when care is taken to collect, share and co-operatively analyze relevant data about the problem situation.

As information is collected, it will become clear that each problem is accompanied by numerous problem signals, or messages that reinforce the need for improvement. These originate from the alternative perceptions about the situation and tend to compete for dominance. Thus, the analysis of information about a problem begins by sorting among the various problem signals and selecting those that are most relevant and manageable by the school community.

For purposes of illustration, then, the Bridgeton example (Case I) will pursue the analysis of a school organization problem by means of the "Force Field" technique. Theirs is mainly a problem of communication among the school community.

On the other hand, the Gatorville example (Case II) concentrates on student performance, using a diagnostic approach to the specific area of reading comprehension. The problem here is one of lagging student performance.

Bridgeton

Case I

At Bridgeton, the principal began working with the Teacher Education Center (TEC) linker to systematically gather data on the school. In their efforts to obtain more specific information to share with the faculty, they made observations, conducted interviews and administered an instrument to assess the school climate. In this way they were able to screen through organizational problems and select ones which required closer analysis.

Specific problems were identified by low scores on the checklist, some of which are listed below:

--There are many discipline problems in the school.

--The parents infrequently attend school events.

--The relationships among most teachers are competitive versus cooperative.

--There are several faculty sub-groups in the school and little communication among them.

--The previous principal often did not ask for suggestions from the faculty.

--Teachers say they don't have access to needed resources.

Categories were developed in which to group problems which people felt warranted closer analysis:

1. School Based Staff
2. Central Administration
3. School/Community Relations
4. Organizational Climate
5. Student Performance and Behavior

Gatorville

Case II

At Gatorville a grade level chairman raised the issue of poor student performance at a faculty meeting which had been called to discuss priority needs for the coming year. He reported his own observations and feelings about the matter, then asked other teachers to speak out.

The response was overwhelmingly in favor of trying to improve the existing reading program. However, no one was

completely sure of how this could be done or what parts of the reading program needed most attention.

At a follow-up meeting the principal and faculty agreed to focus their attention on problem areas which might be reflected in current test score data. At hand were the results of a recent administration of the Stanford Achievement Test which revealed that 46% of the pupils at Gatorville Elementary scored below the national norm in reading. The statewide assessment results indicated that average pupil performance in grades 1-5 was at the 62nd percentile in communication skills and at the 67th percentile in mathematics. Reading comprehension received the lowest score in both areas.

Bridgeton

Case I

When the Bridgeton faculty met to hear the results of the checklist survey, they got together in small groups. Discussion focused on giving meaning to the various "trouble spots" which had been identified. They tried to separate facts (data and shared observations) about the current situation from opinions. Then assumptions were made about the probable causes of the problem.

At one point in problem analysis, the groups were asked to develop a list of tentative goals and objectives to guide their future activities toward improving school communications. They also identified some likely strategies for moving in the direction of the desired state of affairs, which included the formation of committees to study each of the troublesome categories. Team members joined the various committees with the understanding that they would first develop their own skills in problem solving, then apply their skills to a specific area of concern.

The TEC linker arranged for the committees to use problem solving training modules in their work together. As a part of their training, the committees studied the context of the problem and prepared the following force field analysis.

FOR →	← AGAINST
Both teachers & parents want a better school.	Some parents have negative perceptions of schooling.
All groups have information & resources that would be helpful to the others.	Some teachers feel uneasy when non-professionals participate in school affairs.
The principal is committed to improving the flow of information among groups.	Professional "jargon" is difficult for lay people to understand.
The faculty wants community input in school decisions & support for change efforts.	Some people believe that time spent sharing concerns is wasted.

Bridgeton's Problem Statement

The Bridgeton faculty phrased their problem description as answers to four questions:

1. Who is affected? The entire community is affected by the problem, but the burden falls most heavily on the school faculty and students.
2. Who is causing the problem? The problem is caused by the school staff which has not communicated sufficiently with the members of the community so that they can understand what the problems and goals of the school are. Consequently, community members are not supportive and involved with school improvement efforts.
3. What kind of problem is it? The kind of problem is too little and inaccurate communications.
4. What is the goal for improvement? To increase communications with parents, faculty and the entire community and to achieve agreement among a majority of community members about what the goals of the school should be.

Gatorville

Case II

With the assistance of a university consultant, the faculty of Gatorville Elementary reviewed the diagnostic information that was currently available about their students. They discovered that their current information base did not make it possible to assess "entry skills" for assignment of pupils to instruction or "exit skills" at each of the grade levels affected.

Through the district linker, the faculty acquired a set of materials from the Florida Linkage System that was designed to assist them make better decisions about student performance deficits in reading and the selection of existing products. The first report they studied was entitled, Diagnostic Test Requirements for Reading in the Elementary Grades, which examines the problems, characteristics and purposes of diagnostic testing.

As a result of their study, the faculty took another view of their situation and of possiblilities for acquiring more precise information by using a variety of diagnostic strategies. These included oral questioning and informal inventories, as well as more specific paper and pencil instruments. Of particular significance to the faculty was the identification of "Benchmark" skills that could be monitored from Kindergarten through grade four.

In addition to gathering more detailed information about student performance, the faculty began to assemble a more complete description of the problem context:

A. Student Characteristics

1. Family and homelife conditions
2. Special needs of entering students
3. Test scores, results of diagnostic screening
4. Florida Assessment results
5. Indicators of motivation, behavior & attitude

B. Curriculum and Materials in Use

1. Existing student objectives
2. Primary texts and supplementary materials
3. Specific difficulties with current materials

C. Teaching Practices

1. Nature of class groupings
2. Procedures for student diagnosis & placement
3. Individual teaching practices
4. Classroom aides
5. Student promotion practices
6. In-service training needs

D. Parental Involvement

1. Volunteers
2. Home monitoring of student progress
3. Parental organizations

E. Outside Assistance (University, private, or Department of Education consultants)

Gatorville's Problem Statement

The Gatorville faculty continued their diagnostic assessment and description of problem characteristics:

--42% of the pupils are from low socio-economic households. In general, these households are characterized by (a) the absence of reading materials and (b) parents possessing little formal education.

--20% of the pupils are from Spanish-speaking households where English is infrequently spoken.

--Materials currently used in the teaching of reading require prerequisite skills not possessed by Gatorville pupils. Seven specific enabling skills for reading comprehension have been identified.

--Current modes of instruction in reading are group-paced. Pupils exhibit a disparity in learning rates which are not accommodated by group pacing.

Just as it was important to understand the problem situation in terms of specific performance, behavioral or attitudinal deficits, it is equally important that the desired state of affairs (or goals for improvement) be spelled out. How should performance profiles look? What behaviors and activities are desired of the school faculty and community? What attitudes should be reflected in the choices students or teachers make? Etc.

Unless the school's goals arise from some such logical focusing, vague statements about needed improvements are likely to result. On the other hand, goals which arise from specific statements of problems and needed improvements are more likely to be realized and easier to translate into action in the classroom

	Goals
Bridgeton	--To involve the community in determining school priorities --To develop trust among members of the school and community --To bring together and use available resources --To apply research and development outcomes using diagnostic/prescriptive procedures
Gatorville	--To provide for individually paced instruction based upon assessment of specific enabling reading skills --To provide materials which are appropriate for the existing skill levels of Gatorville pupils --To provide materials which accommodate the special needs of bilingual students

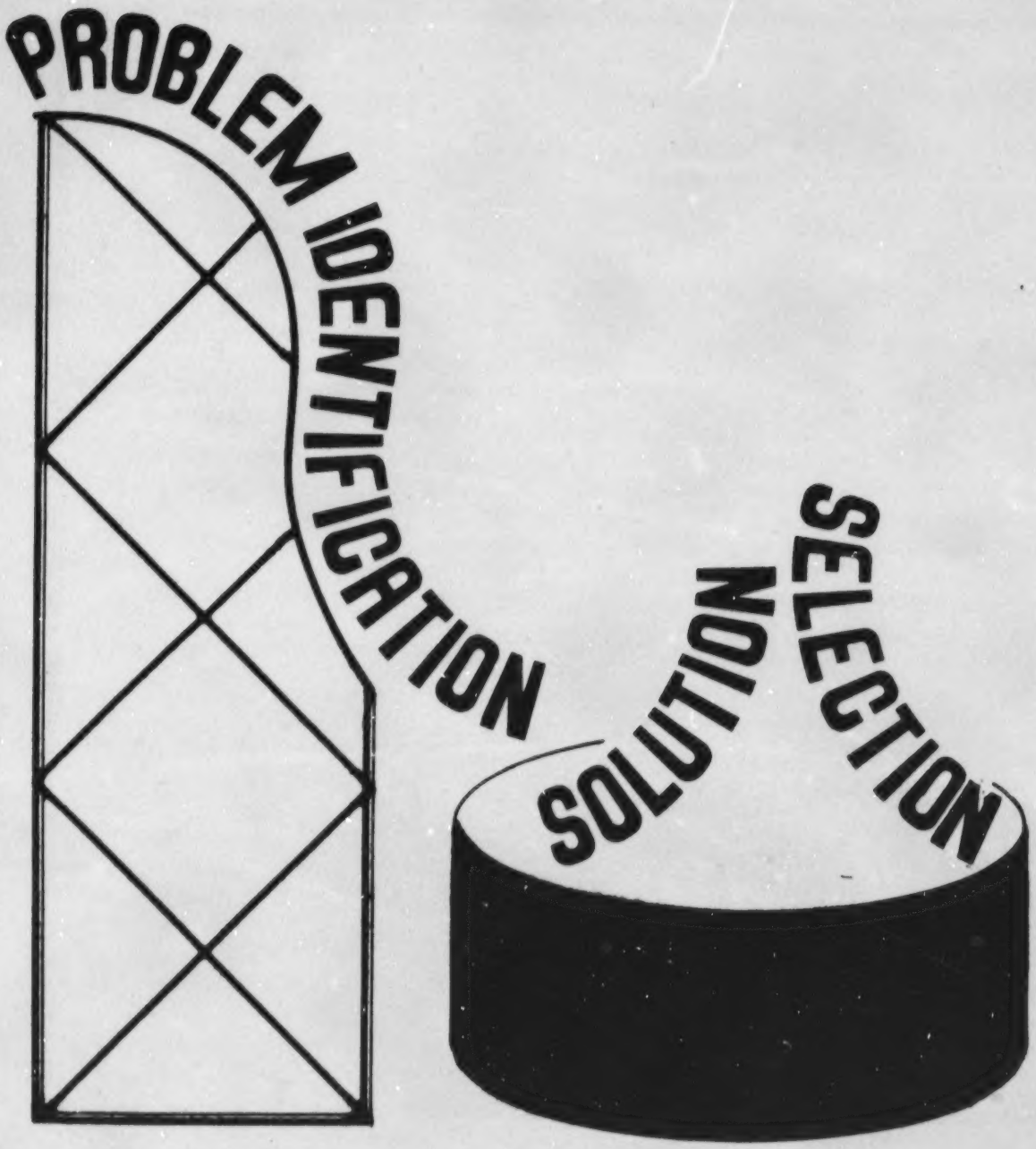
BONUS

One of the benefits of systematic problem identification is that appropriate solutions to many of the school's problems are likely to be discovered just by going through the process. Teachers may see ways of reorganizing current materials or adapting existing procedures to the needs of their students. Administrators may solve some communication problems by modifying school policy, changing the format of faculty meetings or providing more flexibility in the schedules of students and teachers. Thus, many kinds of problems can be resolved within the school and without calling upon outside assistance or resources.

Such was the case for the Bridgeton faculty who tackled the problem of too little and inaccurate communications. One of their concerns had been for in-house communications, which they felt had been lacking for years. The process

of information gathering, sharing and group activities used to clarify the general problem area greatly increased the perceived level of communications within the school. As some suggestions from the faculty were aired and adopted, teacher morale took an upswing surge.

This allowed the faculty to concentrate their energies on the remaining school-community communications problems and begin addressing problem areas associated with lagging performance in basic skills. Because their approach to the student performance problem so closely parallels the Gatorville (Case II) example, the Bridgeton study will not be pursued further in these materials.



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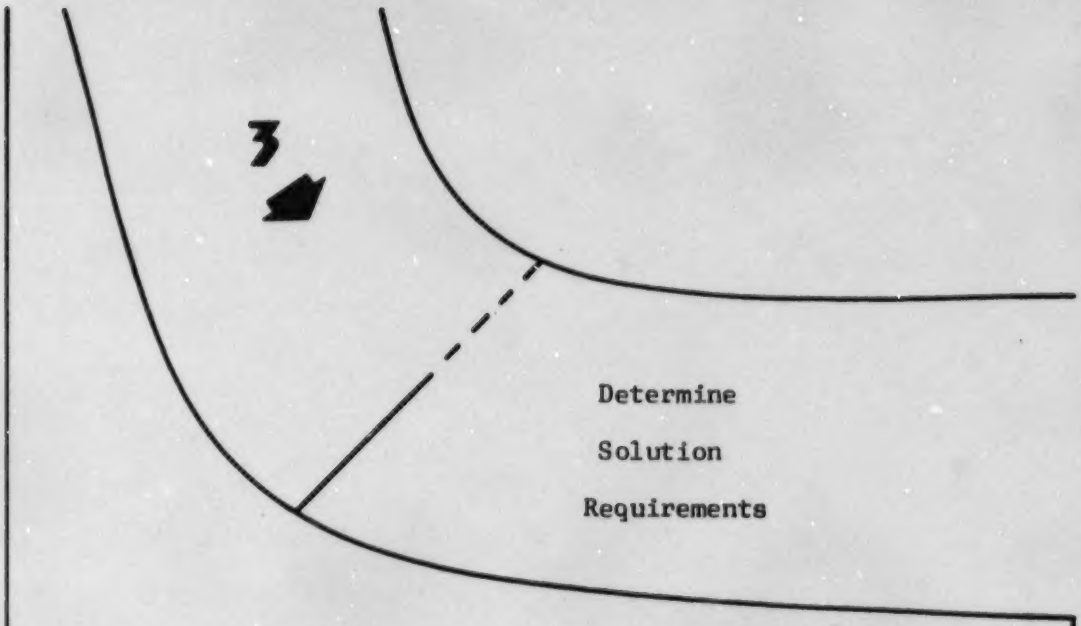


Before reaching into the grab bag of alternative materials and procedures that claim to bring about improvements in student performance, behavior or attitude, it is desirable to have a set of tentative specifications which reflect the characteristics of the school community and the problem at hand. If not, the glitter of novel products or impressive organizational procedures may obscure the original intention----that of resolving a specific gap

between the current and some improved state of affairs. New ideas often spark new awareness of problem situations, which in turn need to be clarified and shared among members of the school community before further action is taken. The school must take care not to fall into an attractive solution; rather, they should carefully choose among potential solutions.

In order to facilitate the eventual search for alternative solutions, the school community should be involved in specifying requirements, desirable characteristics and built-in limitations. Such items as costs, teacher training, time requirements, material format and cultural orientation should be considered. Not only does this step increase the probability of finding the most desirable alternative available, it also increases the efficiency of search activity.

While every school will probably have different requirements for prospective solutions, there are some general areas of consideration:

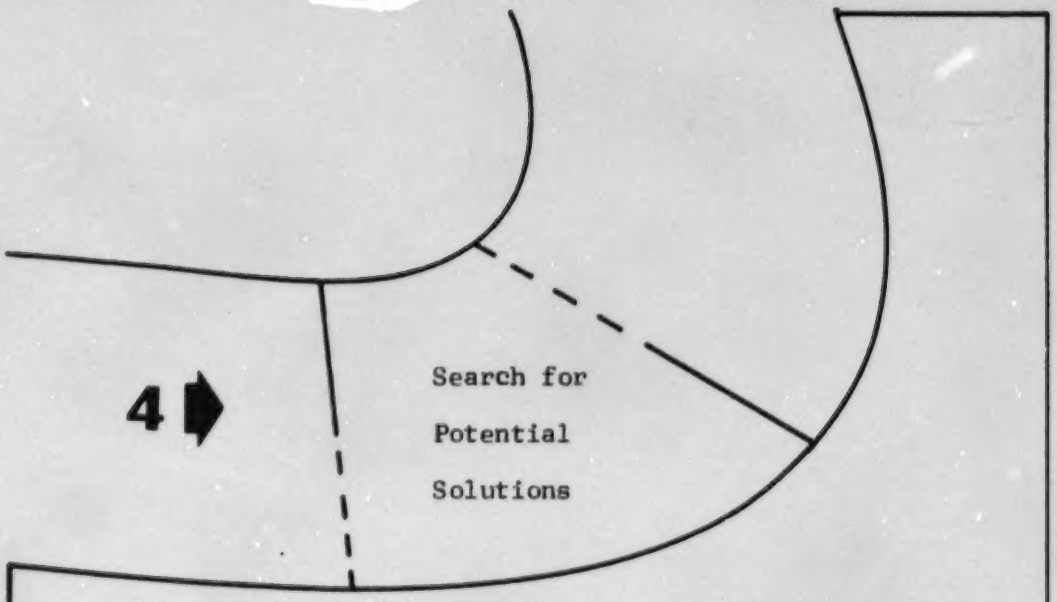
--The claimed benefits of the solution should be directly related to the needs of students and faculty.

--The solution should be consistent with the value system of the school community.

--It shouldn't require decisions or commitments which exceed the legitimate authority of the local school.

--It should be a practical alternative in that it is compatible with the resources that are available to the school.

--There should be a reasonable balance between what the solution costs and what benefits can be reasonably expected.



As the Bridgeton example points out, many of the problems which face today's schools can be satisfactorily resolved by coordinating existing resources and human energy. Other, more troublesome problems warrant examination of products or procedures which might be able to bring about the desired improvements.

Usually, all local sources and suggestions are identified first, then a search is made of information housed

in the Teacher Education Center or elsewhere in the district. Additional information can often be gained through a regional university and the State Department of Education (FREE).

One of the most fruitful sources of information about solution alternatives is the knowledge base which has resulted from several decades of educational research and development effort. This knowledge base is made up of information about R & D studies across the United States and the world. The information includes these possibilities:

--Conclusions about general principles of subject-matter learning, teaching, classroom management and other related pieces of information;

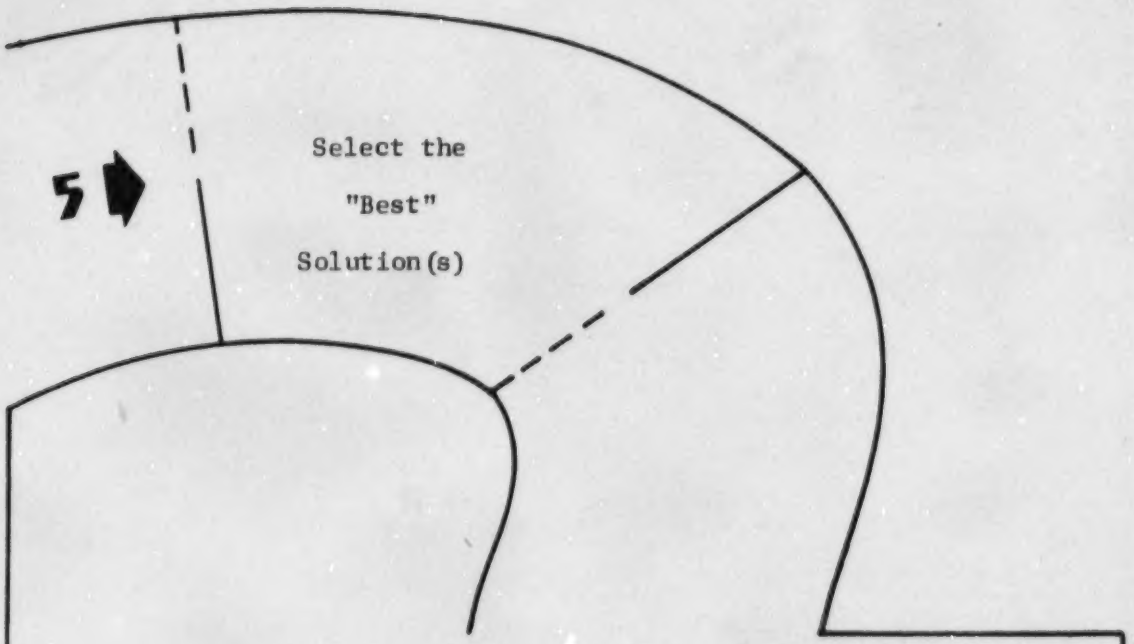
--Procedures for teaching, instructional planning and evaluation. These are often available in the form of teacher handbooks, manuals or evaluation results;

--Teacher education materials intended to provide the classroom professional with practical ways of implementing newly developed materials or procedures;

--Products, such as text books, kits, and other instructional materials intended for use by students;

--Curriculum projects which often provide efficient organizational patterns for using a variety of products and procedures.

Because there are so many alternatives available, the school needs to communicate to the "search agency" fairly detailed information concerning what they are looking for and also what they are not looking for. A search for useful validated products is, after all, a matter of step-by-step narrowing of possibilities. If the search agency (or person) is to proceed efficiently, some essential information must be available about the school's current situation and the problem which has arisen in this situation. These needs underscore the importance of following the preliminary steps of problem identification and clarification, setting goals and determining solution requirements.



Even when the problem is carefully described and solution requirements are set forth, an exact match of the problem situation and one "best" solution is rarely made on the first try. Instead, the search agency is usually able to suggest several possible alternatives, or "options." Any one of these (or a combination of alternatives) could resolve the school's specific problem. After receiving such recommendations, the school faculty and administration are responsible for choosing among the options or requesting further information.

On the next page is an outline of the Product Description Checklist which was used by the Gatorville faculty. The comparisons suggested by the checklist are expected to make it possible for a school staff to give well-considered answers to the following questions:

I. Matching School Objectives to a Product

Do the objectives (goals, purposes) of this educational product match (A) the specific changes and goals for improvement in the school's problem? (B) the features of a solution as spelled out by the faculty and administration before the search began?

II. Matching the Product to the Local School

Do the materials and approach of this educational product match the needs of the pupils of the school? The teachers of the school? The principal? Existing patterns of classroom organization? Available resources? The parents and community?

Product Description Checklist

(In Outline Form)

Name of Product--

Target Grade(s)--

What would be changed if this product were used instead of current materials or procedures now in use? Use the checklist to make a comparison of features.

	Practice Using Current Materials	Projected Practice Using Product
Evidence of Validation	_____	_____
Classroom Organization	_____	_____
Student Activities	_____	_____
Teacher Activities	_____	_____
Materials	_____	_____
Administration	_____	_____
Parental Involvement	_____	_____
Model and Strategy for Learning	_____	_____
Objectives	_____	_____

The solution selection step of the FLS problem solving model is a critical decision point for those who are involved in the change effort. The decision calls for a commitment to a specific option, at least through a trial implementation phase. The degree to which the solution is accepted into the instructional routine of the school is related both to the specific product or practice to be used and to the process by which it was selected. The final decision signals a number of changes:

--It marks the transition from speculation and wishful thinking to planning for action.

--It puts the school into a position of making a commitment of considerable importance and duration.

--It requires adoptive behavior, which often means changing the usual patterns of instructional activity, staff organization and/or faculty interaction.

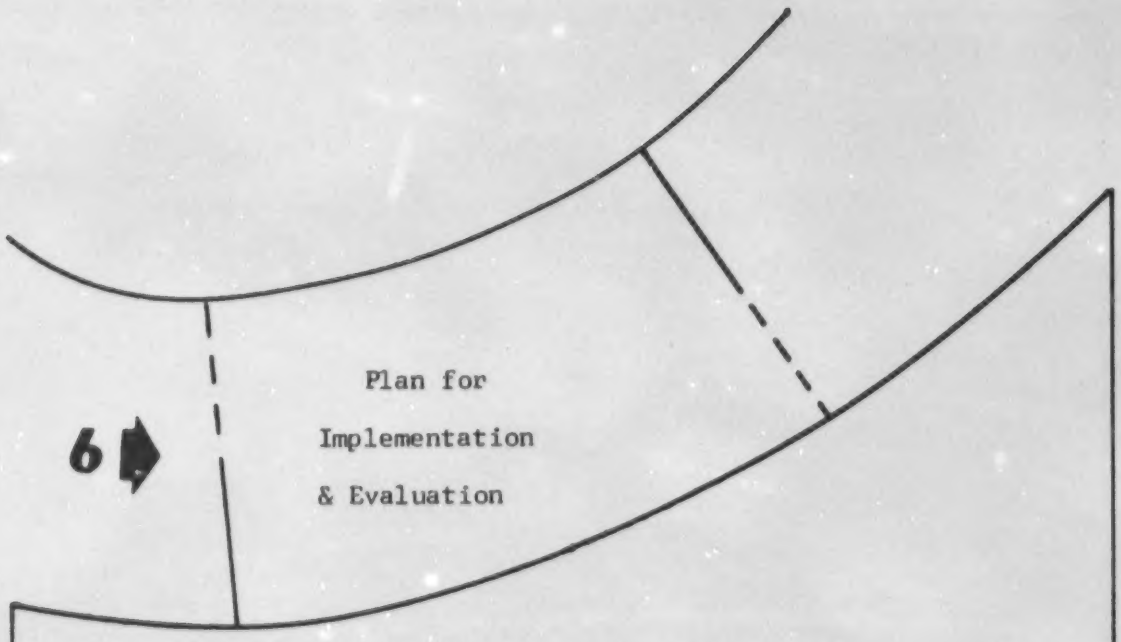
--It often results in adaptive behavior, through

which the chosen solution may be significantly modified in order to fit specific characteristics of the school.

--It creates a climate of expectancy which is difficult to realize on a short-term basis.

--It signals a change in relationship with the facilitating team and the organizations which provide outside resources and assistance.

The final selection of a solution involves more than simply choosing a good or not so good option. Also involved is the adequacy of the procedure by which the decision is made. At this crucial phase in the change process, the Florida Linkage System can provide training materials which will assist school personnel select the most appropriate solution for their school.



Once a desirable solution has been chosen, considerable planning is then needed to translate this decision into action. The facilitating team may make preliminary decisions about the design of strategies and procedures for acquiring, implementing, managing and evaluating the chosen solution. However, it is critical to the future success of the project that the faculty and administration accept whatever plans are made for them. For this reason, their involvement is essential.

Here are some areas of planning that should be considered:

--Plan for any modifications in material or procedure that are necessary for smooth implementation.

--Plan the support program needed to acquire and implement the selected solution.

--Prepare a time and activity schedule to keep track of progress.

--Identify the specific responsibilities which individual faculty and administrative personnel should assume.

--Plan for appropriate staff development activities.

--Develop formative and summative evaluation plans.

Gatorville

Gatorville

The facilitation team prepared a time by activity schedule which identified those who were involved and when. In addition, they designed an evaluation plan which called for the collection of four kinds of data:

1. Measures of pupil performance;
2. Assessments of teacher attitudes toward the chosen solution;

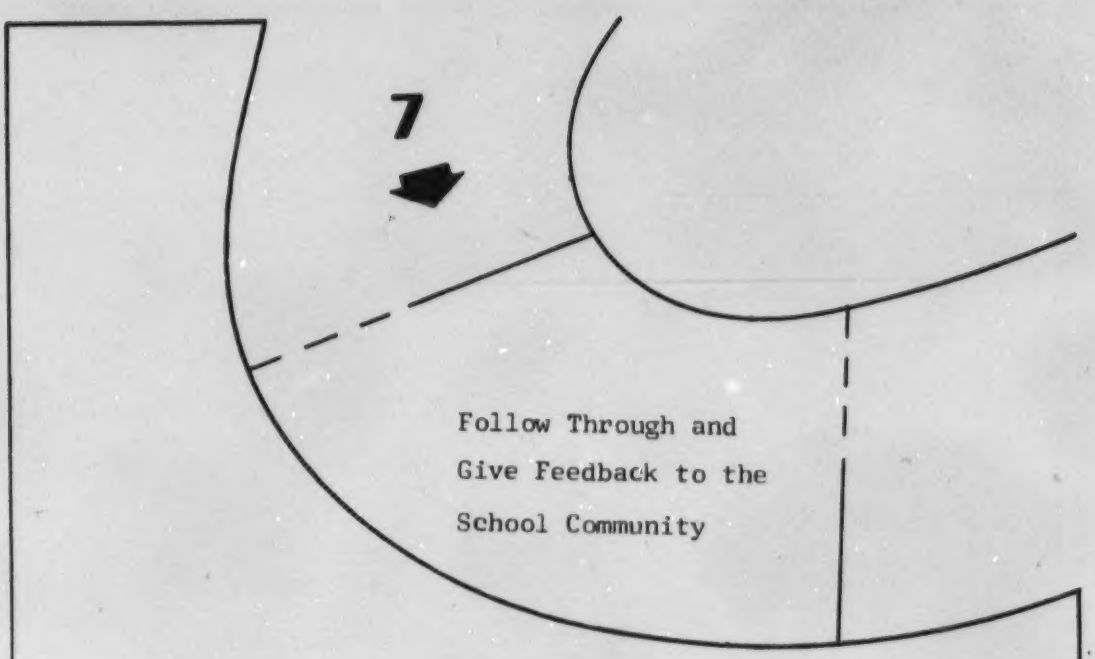
3. Identification of problems encountered during implementation; and
4. Identification of unanticipated outcomes, both positive and negative.

Specific responsibilities and time commitments were described. The planners then compared available versus needed resources or services. They came up with the following needs:

--Evaluation assistance from a nearby university;

--An implementation specialist from the school district where the new materials were developed.

These needs were fulfilled using Teacher Education Center, district and local school resources. The remaining details of the plan for implementation were formulated and presented to the group of reading teachers, the principal and the TEC linker. With several minor changes in scheduling and personnel assignment, the plans were adopted by the entire faculty.



The final stage of the FLS model provides for putting the school's plans into action, thus, following-through with a design for specific improvement. Evaluation plans are especially important during the last step of any purposeful attempt to resolve a problem situation. The feedback that evaluation activities can provide to the school community reinforces their successful efforts at improvement and suggests ways to modify those that don't result in the desired improvement.

Educational evaluation can perform other services in addition to judging the worth of a set of materials or a teaching procedure. It can provide timely information to assist in decision making. In this capacity, the function of evaluation is to shape and improve decision-making, not to render a value judgement about its effectiveness. The latter is reserved for an appraisal of the final results of the project after trial implementation.

Thus, there are at least two distinct (yet, complementary kinds of evaluation that accompany educational change activity. One is formative; the other is summative. One is concerned with the effective implementation and on-going refinement of an educational change effort. The other is concerned with the judgement of results and outcomes.

Evaluation can be extremely helpful by providing information that supports good decision making. This is especially true during the process of change, where the final outcome often depends upon little decisions that are made between planning and implementation.

At the problem identification phase, certain kinds of information are needed in order to correctly distinguish among problem signals. In order to select the "best" solution strategy from among many competing alternatives, another kind of information is required. And still another is needed to support the decisions that are associated with putting a new product, program or practice into effect.

In the sense that these evaluation activities shape and/or refine the process of educational improvement, they are <u>formative</u> in nature. Formative evaluation can also lead to corrective action once things have gotten underway.

Thus, even with the best of plans for implementing a particular solution, things do not always follow the course that was originally set. Important decisions can be overlooked; unanticipated problems can develop; human perceptions (and priorities) can change as a result of first hand experience. For a variety of reasons, plans may need to be updated from time to time in response to changing circumstances. This is another service that formative evaluation can serve----to help make appropriate mid-course corrections during implementation.

The ultimate purpose of evaluation is usually to arrive at conclusions as to the worth or value of a particular thing (in this case, materials and/or procedures). Or the appraisal may be a relative one, as in comparing one set of materials with another and then deciding which is the better of the two. In either case the ultimate concern is for end results, what effects the materials or procedures have upon student performance, behavior or attitude. These are summative evaluation activities.

Summative evaluation attends to outcomes, both planned and unintended. First, there is a check made between anticipated and actual improvements according to the school's specific objectives. Then, an attempt is usually made to detect any unanticipated benefits or any adverse side-effects that may have come about as a result of implementing a particular set of materials or teaching procedures. Finally, these findings may be compared with the perceptions of various members of the school community.

As a result of summative evaluation, the basic choice regarding the future use of an educational product or practice can be made----whether to terminate or continue with implementation. In making this decision, it is important to consider not only the tangible performance benefits, but also the perceptions and feelings of the school community. Similarly, the presence of any significant side effects or unanticipated benefits should be considered along with the relative merits of the new versus old approach.

If the decision is to continue with the current solution alternative, the next consideration is whether to modify the characteristics of the materials or procedures in order to better serve the target population or possibly to expand implementation to include additional studdents at the same or different grade levels. Beyond the local school site, a successful solution should be recommended for possible use at other schools within and/or outside of the district. Whatever the final outcome,

documentation of the school's conclusions should be kept and made available to other teachers and administrators who face similar problem situations.

What Next?

If you would like to follow through with the FLS approach to school improvement, here are some ways to get further involved:

--Talk it over with the faculty and principal at your school,

--Contact your district "Linker" through the county administrative office or local Teacher Education Center, or

--Write or call the Florida Linkage System

Office of Dissemination/Diffusion
Florida Department of Education
Tallahassee, Florida 32301

904/487-1078

Available Related Materials

--Diagnostic Test Requirements for Reading in the Elementary Grades

--A System for Rapid Access of Educational R & D Product Information

--Guidelines for School Use in Initiating a Search for R & D Information

--Selecting R & D Products to Meet School Needs

--Solution Analysis Series:

Narrowing the Objectives

Rating the Costs and Benefits

Developing a Work Action Plan

Training for Facilitating and Linking (Selected Modules)

--Orientation (to F.L.S. & the training system)

--Problem Solving Simulation

--Feelings and Perceptions

--Concepts & Skills of Feedback

--Prioritizing Goals

--Decisions Based on Data

--Defining the Problem

--Force Field Analysis

--Exploration of Alternatives

--Contingency Planning
& Trouble Shooting

--Reporting & Assessing
Processes and Results

--Matching the Solution
To the Problem

--Planning & Evaluating
for Implementation

**Additional modules are
included in the training
package.